

ABSTRACT OF THE DISCLOSURE

A compiler includes: a syntax analyzer analyzing whether or not an operation described in a source program conforms to grammatical rules, and analyzing whether or not a combination
5 of the operations defines an intrinsic function and details of processing operations of the intrinsic function; an intrinsic function definition database storing a definition of the intrinsic function and the details of the processing operations of the intrinsic function, as analyzed by the syntax analyzer;
10 a code generator generating machine instructions from the source program based on a result of the processing of the syntax analyzer; and a code optimizer optimizing the machine instructions to machine instructions corresponding to the details of the processing operations of the intrinsic function, if a string
15 of the machine instructions generated by the code generator are in agreement with the details of the processing operations of the intrinsic function stored in the intrinsic function definition database.